



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D4680-041

Job Sheet 192279



Part No: D4680-041

Job Qty: 1 pcs

Part Name: Skidtube Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/20/19

Job Tracking No:

Due Date: 4/10/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV F IPP REV:A 13.04.16 NEW ISSUE DD VERF:JLM IPP REV:B 13.08.08 PB2 DD VERF:JLM IPP REV:C 13.09.10 PB3 DD VERF:JLM IPP REV:D 13.11.14 AS PER DWG REV.B DD VERF:JLM IPP REV:C 14.11.24 AS PER DWG REV.C DD VERF:JLM IPP REV:D 15.06.10 AS PER DWG REV.D DD VERF:JLM IPP REV:E 16.03.23 AS PER DWG REV.E DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier	Lead Time	Sign-off
120	Skidtubes - 1	1 pcs	4/10/19		0.00	4.86	Skidtubes - 1		JD
							Skidtubes - 2		
							Skidtubes - 3		
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
140	QC 5	1 pcs	4/10/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		JD 19.04.01
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
150	Handfinish - 1-1 Chemical-B4B	1 pcs	4/10/19		0.00	0.73	Handfinish - 1 - 1 - B4B		
							Handfinish - 1 - 2 - B4B		
							Handfinish - 1 - 3 - B4B		
							Handfinish - 1 - 4 - B4B		
							Handfinish - 1 - 5 - B4B		



Container No: S167852



Part: D4680-041

Job No: 192279

Serial No/Batch: S167852

Revision: F

Inspector:

Exp Date:

Instructions: Various STC's

Date: 03/29/19

Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL: 1 613 632-5200
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www.dartaerospace.com

				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	D.R 19/04/02
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
160 QC 7	1 pcs	4/10/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	mb6
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
170 Skidtubes - 2 - B4B	1 pcs	4/10/19	0.00 4.86	Skidtubes - 1 - B4B	
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	
				Skidtubes - 5 - B4B	

				Skidtubes - 6 - B4B					
				Skidtubes - 7 - B4B					
180 QC 5	1 pcs	4/10/19	0.00 0.00	QC 5 - 10					
				QC 5 - 12					
				QC 5 - 17					
				QC 5 - 18					
				QC 5 - 19					
				QC 5 - 22	DAS				
				QC 5 - 24	24				
				QC 5 - 3	9-89				
				QC 5 - 43					
				QC 5 - 49					
				QC 5 - 51					
				QC 5 - 58					
				QC 5 - 68					
				QC 5 - 9					
				QC 5 - 50					
				QC 5 - 30					
				QC 5 - 40					
				MAY 27 2019					
				210 Handfinish - 2-1 Pressure- B4B	1 pcs	4/10/19	0.00 0.73	Handfinish - 2 - 1 - B4B	2 1/2
Handfinish - 2 - 2 - B4B									
Handfinish - 2 - 3 - B4B									
Handfinish - 2 - 4 - B4B									
220 Powdercoat - 1 White Gl(A)- B4B M175439.	1 pcs	4/10/19	0.00 0.17	Powdercoat - 1 - B4B					
				Powdercoat - 2 - B4B					
				Powdercoat - 3 - B4B					
				Powdercoat - 4 - B4B					
START: 9:45 A.T. 3:00 FINISH: 10:15.									
230 QC 3	1 pcs	4/10/19	0.00 0.00	QC 3 - 10					
				QC 3 - 13					
				QC 3 - 15					
				QC 3 - 17					
				QC 3 - 18					
				QC 3 - 2					
				QC 3 - 28					
				QC 3 - 3					
				QC 3 - 30					
				QC 3 - 34					
				QC 3 - 36					
				QC 3 - 41					
				QC 3 - 51					
				QC 3 - 58					
				QC 3 - 59					
				QC 3 - 68					
				QC 3 - 9					
				QC 3 - 40					
				QC 3 - 19					
BEB 19-05-29.									
260 Handfinish - 4-1-Assembly- B4B	1 pcs	4/10/19	0.00 0.73	Handfinish - 4 - 1 - B4B	all 10-5-24				
				Handfinish - 4 - 10 - B4B					
				Handfinish - 4 - 11 - B4B					
				Handfinish - 4 - 12 - B4B					
				Handfinish - 4 - 13 - B4B					
				Handfinish - 4 - 14 - B4B					
				Handfinish - 4 - 15 - B4B					
				Handfinish - 4 - 2 - B4B					
Plex 3/20/19 11:24 AM Dart.lajeunesse.mari									

Plex 3/20/19 11:24 AM Dart.lajeunesse.marie

270 QC 5	1 pcs	4/10/19	0.00 0.00	Handfinish - 4 - 3 - B4B	
				Handfinish - 4 - 4 - B4B	
				Handfinish - 4 - 5 - B4B	
				Handfinish - 4 - 6 - B4B	
				Handfinish - 4 - 7 - B4B	
				Handfinish - 4 - 8 - B4B	
				Handfinish - 4 - 9 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	JUN 04 2019 DAS 68
				QC 5 - 9	9-89
300 Packaging 3-1 - Stock - B4B	1 pcs	4/10/19	0.00 0.00	QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	JUL 15 2019
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	DAS 75
				Packaging 3 - 11 - B4B	9-89
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	

310 QC 21 - SA	1 pcs	4/10/19	0.00 0.00	Packaging 3 - 36 - B4B	
				QC 21 - SA - 21	DAS
				QC 21 - SA - 70	JUL 15 2019 70
				QC 21 - SA - 53	9-89

Part Op 120 - 1-Cut Aft end as per dwg D4680 3-Drill Aft & Fwd Cap holes using DT8678 & DT8901 open aft cap 0.187". 4-Locate Descriptions: DT10149 & Drill Ground wire hole on top of Tube. 5-Locate DT10149 with 0.187" cleco in aft cap, then Pilot Drill all X-Bolt holes using 0.187" drill. 6-Open ground wire hole .297" at 95.75" (1 at fwd end & 2 at aft end at 20.81" ref.) 8- 3 most fwd x-bolt holes must be laid out manually, open to #30. 9-Open Aft & Fwd Cap holes using .208" drill. 10- Open X-Bolt holes to .750" (10 places) 11- Drill Rivet Holes as per Dwg D4680 using DT10065 ***DO NOT DRILL RIVET HOLES ON SECTION G-G (TWO PLACES) Open G-G to .750 12-Deburr holes.

140 - (QC5- Inspect part completeness to step on W/O)

150 - (Chemical Conversion Coat per QSI005 4.1)

160 - (QC7-Inspect Chemical Conversion Coat)

170 - 1- Bond web as per Dwg D4680 & QSI 015 2- Seal all faying surfaces using proseal and rivet Doubler as per Dwg

D4680. A/R Proseal Batch: 5146139 exp date: 6/19 ***LET IT CURE FOR 7HRS*** START TIME: _____ FINISH TIME: _____

3- Rivet doublers as per dwg Shave rivet as required, remove Proseal spill over. 4- Ream holes section C-C as per dwg, deburr 8 places 5- Swage x-bolt spacers as per Dwg D4680 and section C-C 8 places. 6- Swage x-bolt spacer as per dwg D4680 section G-G 7- Trim/Grind flush per QSI 002

180 - (QC5- Inspect part completeness to step on W/O)

210 - (Pressure Wash per QSI005 4.3/ Clean and remove all markings), Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

220 - (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum), START TIME: _____

230 - (QC3- Inspect Part Finish)

260 - (Assemble as per dwg), 1- Install Ground Wire inserts as per Dwg D4680. 2-Inspect for Foreign objects 3- Install Fwd & Aft caps as per Dwg D4680 and Detail "A" & "B". Fastener must be install wet as per note (9). Seal all faying surfaces note (8) A/R 241 Sika Flex Batch: 5174342 Exp Date: 12/12 4- Wing Walk as per Dwg D4680 and QSI 005 4.4 Batch: 5185147

270 - (QC5- Inspect part completeness to step on W/O)

300 - (Identify as per dwg & Stock Location: _____)

310 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D4680-041-BENT	Extrusion Bent	1 pcs (1 ea)	120-Skidtubes - 1	5157286
D5520-1	Doubler	2 pcs (2 ea)	120-Skidtubes - 1	5146139
CR3212-5-05	Rivet	68 pcs (68 ea)	170-Skidtubes - 2 - B4B	5157507
D4681-041	Web Assembly	1 pcs (1 ea)	170-Skidtubes - 2 - B4B	5164043
AELS-1032-130	Rivnut	3 Ea (3 ea)	260-Handfinish - 4-1-Assembly-B4B	5152720
AN3C4A	Bolt	3 Ea (3 ea)	260-Handfinish - 4-1-Assembly-B4B	5143675
AN3C5A	Bolt	2 Ea (2 ea)	260-Handfinish - 4-1-Assembly-B4B	5174233
AN526C1032R10	Screw	2 Ea (2 ea)	260-Handfinish - 4-1-Assembly-B4B	5166981
D2965	Cap	1 pcs (1 ea)	260-Handfinish - 4-1-Assembly-B4B	5045482
D2965-3	Cap	1 pcs (1 ea)	260-Handfinish - 4-1-Assembly-B4B	5166571
D4686-1	Spacer	8 pcs (8 ea)	260-Handfinish - 4-1-Assembly-B4B	5163997
D5304-1	Crossbolt Spacer	2 pcs (2 ea)	260-Handfinish - 4-1-Assembly-B4B	5188225
MS20601-AD4W3	Rivet	32 Ea (32 ea)	260-Handfinish - 4-1-Assembly-B4B	5160312
NAS1149C0332R	Washer	5 Ea (5 ea)	260-Handfinish - 4-1-Assembly-B4B	5158078
D4753-1	Doubler	16 pcs (16 ea)	300-Packaging 3-1 - Stock - B4B	5169505

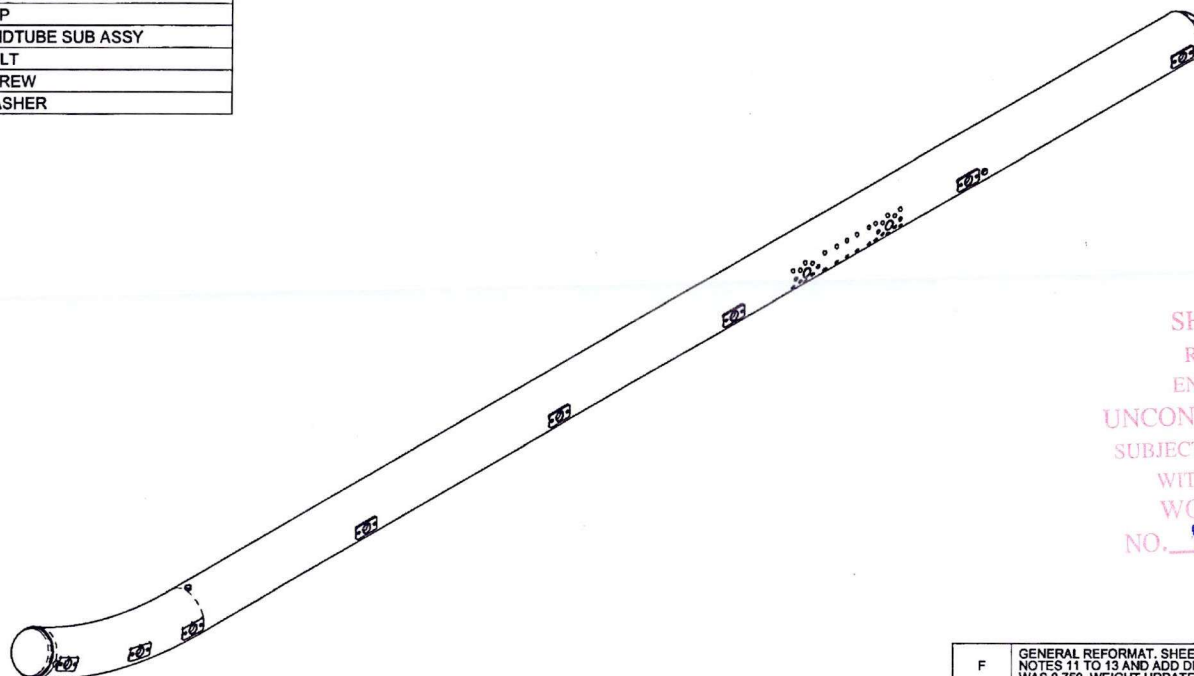
Job Allocations

Operation	Component Part	Required	Inventory	Allocated
120-Skidtubes - 1	D4680-041-BENT	1	7	0
	D5520-1	2	22	0
170-Skidtubes - 2 - B4B	CR3212-5-05	68	1,296	0
	D4681-041	1	8	0
260-Handfinish - 4-1-Assembly-B4B	AELS-1032-130	3	101	0
	AN3C4A	3	2,016	0
	AN3C5A	2	1,446	0
	AN526C1032R10	2	49	0
	D2965	1	23	0
	D2965-3	1	5	0
	D4686-1	8	76	0
	D5304-1	2	43	0
	MS20601-AD4W3	32	846	0
	NAS1149C0332R	5	5,083	0
300-Packaging 3-1 - Stock - B4B	D4753-1	16	35	0

Part Specifications
Specifications could not be found.

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ITEM	QTY	P/N	DESCRIPTION
	X	D4680-041	SKIDTUBE
1	1	D2965	CAP
2	1	D2965-3	CAP
3	1	D4680-043	SKIDTUBE SUB ASSY
4	2	AN3C5A	BOLT
5	2	AN526C1032R10	SCREW
6	2	NAS1149C0332R	WASHER



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WORK ORDER
NO. 192279 ML5
19-03-20

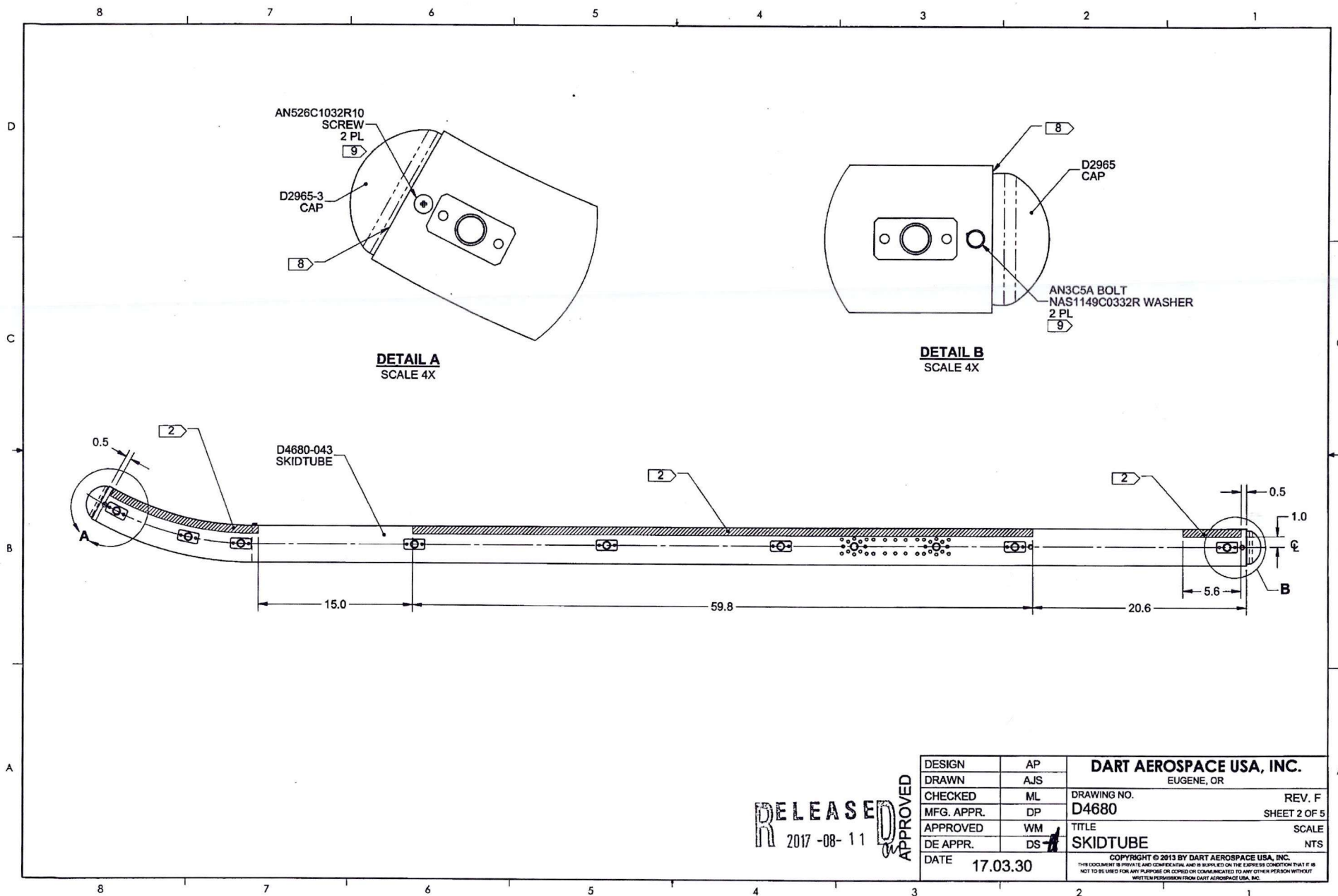
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PAINT TOP SURFACE OF SKIDTUBE WITH MIL-W-5044 ANTI-SKID PAINT (WING WALK) AS INDICATED TO 1.00 ABOVE CENTERLINE PER QSI 005 SECTION 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4680-041" AND B/N PER QSI 044 METHOD 6.4 ON INNER RADIUS OF SKIDTUBE BEFORE INSTALLING D2965 CAP
- 7) WEIGHT: 19.3 lbs
- 8) SEAL FAYING SURFACES WITH SIKAFLEX -241/-291 OR PROSEAL 890/1422 OR MIL-S-8802 CLASS B-2 SEALANT
- 9) INSTALL FASTENERS WET WITH SIKAFLEX -241/-291 OR PROSEAL 890/1422 OR MIL-S-8802 CLASS B-2 SEALANT

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2017-08-11
EN 17-547

F	GENERAL REFORMAT. SHEET 3: ADD ITEMS 8 & 11 ADD NOTES 11 TO 13 AND ADD DETAIL H. SHEET 5: Ø0.188 WAS 0.750. WEIGHT UPDATE. ADD PROSEAL 1422	AJS	17.03.30
E	GROUND HANDLING CROSSBOLT SPACERS NOW SWAGED. WAS WELDED. REMOVED D3492-055 PLUG ASSEMBLIES	AP	15.11.02
D	MOVED AFT GROUNDING FASTENER HOLE AFT 0.25 DUE TO INTERFERENCE. ADDED NOTE 9 (SHT 1), GROUNDING STRAP WASHERS NOW STAINLESS	AP	15.03.04
C	NAS1149F0332P WAS AN960-10L, AN526C1032R10 WAS AN526C1032-10, FWD GROUNDING STRAP FASTENER MOVED AFT (C5-3), Ø0.750 WAS Ø0.758 (B4-3).	AP	14.07.29
B	FWD CAP WAS D2965 NOW D2965-3, VARIOUS DIMENSIONAL CHANGES. D3492-055 PLUG ASSY WAS D3492-051. SWAGING DIMENSION NOW 0.650 WAS 0.661 (D6-2), ADDED DETAIL H (C2-3), MATERIAL D2962-150 WAS D2962-131 (A7-3), GROUND HANDLING THRU HOLES NOW WELDED, ADDED SECTION G-G (D3-2)	AP	13.09.10
A	NEW ISSUE	AP	13.02.13
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	ML	DRAWING NO.	REV. F
MFG. APPR.	DP	D4680	SHEET 1 OF 5
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	SKIDTUBE	NTS
DATE	17.03.30	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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2017-08-11

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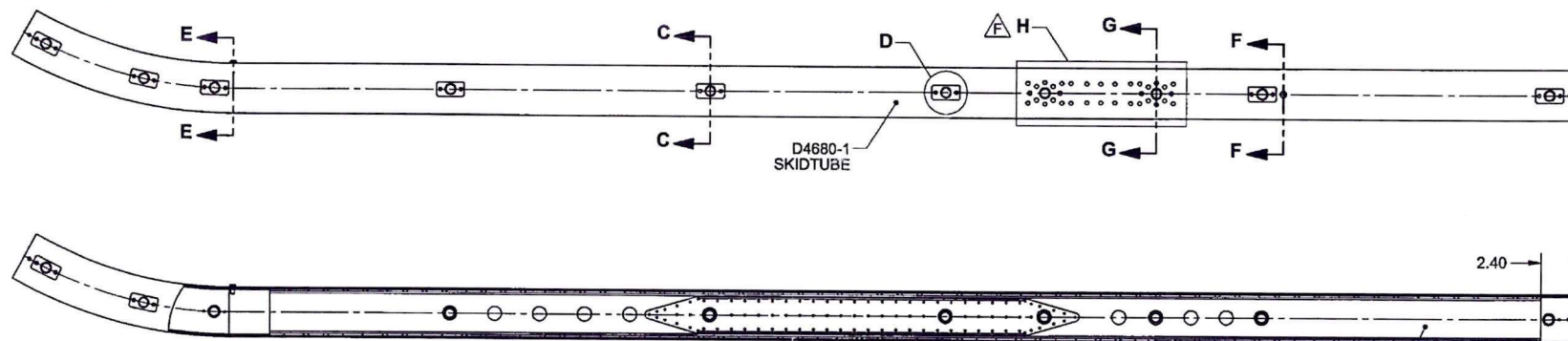
ITEM	QTY -043	P/N	DESCRIPTION
	X	D4680-043	SKIDTUBE SUB ASSY
1	1	D4680-1	SKIDTUBE
2	1	D4681-041	WEB ASSY
3	8	D4686-1	SPACER
4	16	D4753-1	DOUBLER
5	2	D5304-1	CROSSBOLT SPACER
6	2	D5520-1	DOUBLER
7	3	AN3C4A	BOLT
8	32	MS20601AD4W3	RIVET, BLIND, CSK
9	3	NAS1149C0332R	WASHER
10	3	AELS-1032-130	INSERT
11	68	CR3212-5-05	CSK RIVET, CHERRY MAX

OPEN TO
Ø 0.750
THRU 2 PL

13 12 CR3212-5-05
CSK RIVET, CHERRY MAX
34 PL PER DOUBLER

DETAIL H
SCALE 4X

11 D5520-1 DOUBLER
2 PL



D4680-043 SKIDTUBE SUB ASSY

9 D4681-041
WEB ASSY

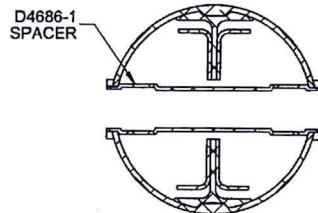
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: APPLY CHEMICAL CONVERSION COATING PER DART QSI 005 4.1 PRIOR TO INSTALLING D4681-041 WEB.
POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 18.6 lbs
- 8) SEAL ALL MATING SURFACES USING PROSEAL 890/1422 OR MIL-S-8802 CLASS B2 SEALANT
- 9) INSERT D4681-041 WEB INTO D4680-1 SKIDTUBE IN LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX -241/-291 ADHESIVE PER DART QSI 015
- 10) INSTALL D4686-1 SPACER AFTER INSTALLING D4753-1 DOUBLERS
- 11) LOCATE THE D5520-1 DOUBLER USING THE Ø0.188 PILOT HOLES ON THE SKIDTUBE AND DOUBLER
- 12) LOCATE QTY (34) HOLES ONTO THE SKIDTUBE PER D5520-1 DOUBLER AND DRILL Ø0.161 THRU SKIDTUBE AND DOUBLER USING DT10309
- 13) COUNTERSINK THE SKIDTUBE Ø0.286 X 100° (34 PL) AND INSTALL EACH D5520-1 DOUBLER USING QTY (34) CR3212-5-05 CSK RIVETS

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2017-08-11

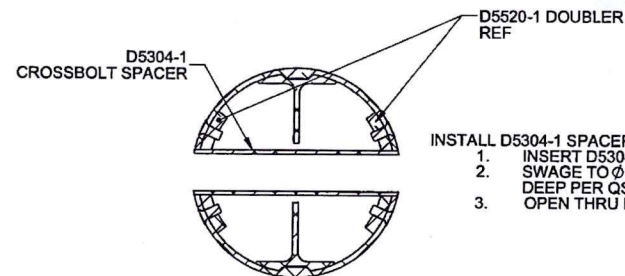
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DESIGN	AP	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	ML	DRAWING NO.	REV. F
MFG. APPR.	DP	D4680	SHEET 3 OF 5
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	SKIDTUBE	NTS
DATE	17.03.30	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



10 SECTION C-C
SCALE 4X
8 PL

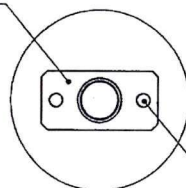
- INSTALL D4686-1 SPACER AS FOLLOWS (8 PL)
AFTER INSTALLING D4753-1 DOUBLERS PER DETAIL D
1. INSERT D4686-1 SPACER
 2. SWAGE TO $\phi 0.650 +0.010/-0.000 \times 1.0$
DEEP PER QSI 002
 3. TRIM/GRIND FLUSH PER QSI 002



SECTION G-G
SCALE 4X
2 PL

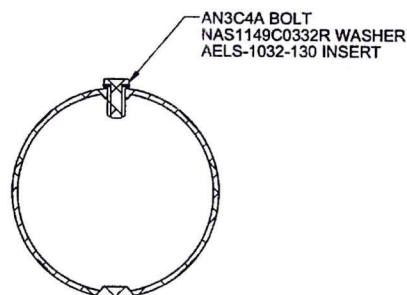
- INSTALL D5304-1 SPACER AS FOLLOWS (2 PL)
1. INSERT D5304-1 SPACER
 2. SWAGE TO $\phi 0.565 +0.005/-0.000 \times 1.0$
DEEP PER QSI 002
 3. OPEN THRU HOLE TO $\phi 0.625$

8 D4753-1
DOUBLER

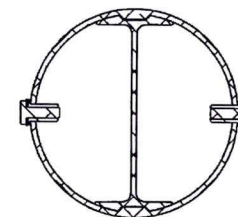


DETAIL D
16 PL (BOTH SIDES)
SCALE 4X

MS20601AD4W3
RIVET, BLIND, CSK
2 PL



SECTION E-E
SCALE 4X



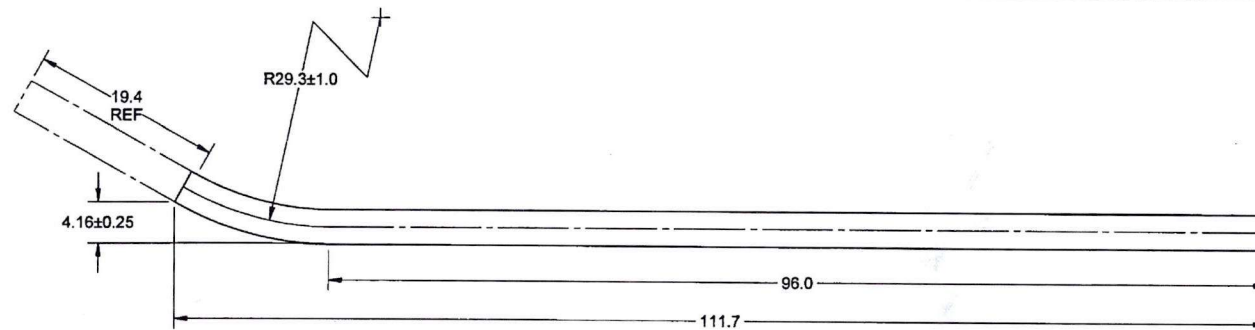
SECTION F-F
SCALE 4X

AN3C4A BOLT
NAS1149C0332R WASHER
AELS-1032-130 INSERT
2 PL

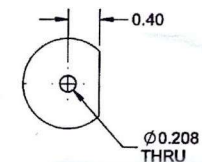
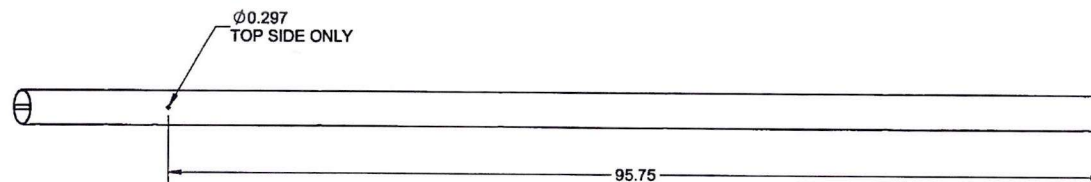
RELEASED
2017-08-11

APPROVED

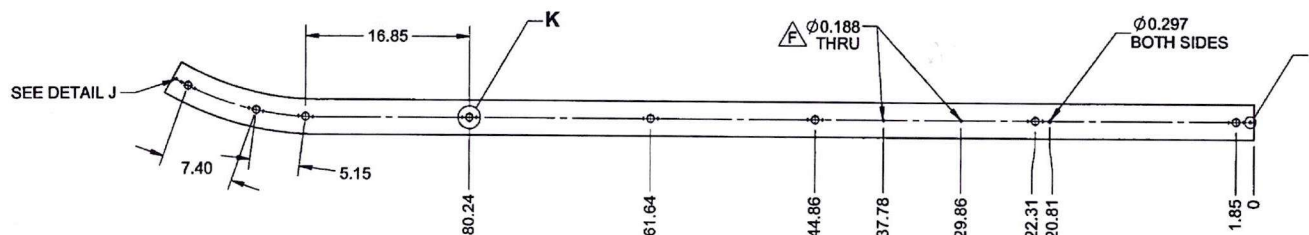
DESIGN	AP	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	ML	DRAWING NO.	REV. F
MFG. APPR.	DP	D4680	SHEET 4 OF 5
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	SKIDTUBE	NTS
DATE	17.03.30	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC.	
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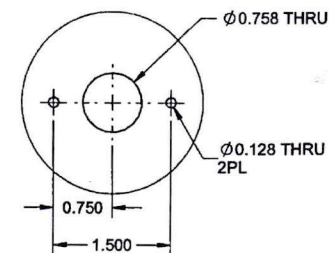
D4680-1 SKIDTUBE BENDING/TRIMMING DETAIL



DETAIL J
SCALE 8X
2 PL



D4680-1 SKIDTUBE DRILLING DETAIL



DETAIL K
SCALE 8X
8 PL

NOTES:

- 1) MATERIAL: MAKE FROM D2962-150 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 11.36 lbs

RELEASED
2017-08-11

APPROVED

DESIGN	AP	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	ML	DRAWING NO.	REV. F
MFG. APPR.	DP	D4680	SHEET 5 OF 5
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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS			
		Skid-tube ☐ Machining ☐ Large Fab ☐	Cross tube ☐ Small Fab ☐ Finishing ☐	Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐	Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐
Date :	Sequence #:	QTY Affected :			MRB (QSI042)
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor
					QC / QA Coordinator
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY			
		☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled	☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function	☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up	☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread
		Other/Details:			

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